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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,714	03/19/2004	John Larry Sanders	30621-DIV2-CIP1	2713

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EXAMINER

PEZZUTO, HELEN LEE

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,714

Applicant(s)

SANDERS ET AL.

Examiner

Helen L. Pezzuto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/29/05 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Response to Amendment

Applicant's amendment to claim 15, Declarations, and Terminal Disclaimer filed on 7/20/05 are acknowledged. In light of the documents submitted and remarks filed, previous claim objection (claim 15), 112, 2nd rejection (claim 25), 103 rejections over Sanders et al. (US-831 or US-155), obviousness type double patenting over Sander et al. (US-382 or US-155) are hereby withdrawn. Claims 15-25 are currently pending in this application.

Drawings

1. The drawings were received on 7/20/05. These drawings are approved.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 and claims dependent thereon are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

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skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner fails to find expressive support for newly inserted limitation of said polymer "being in intimate contact with said fertilizer product" at page 7, line 21.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 15 and claims dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner fails to find the specific definition in applicant's specification for fertilizer "being in intimate contact with" with a substantially water-soluble dicarboxylic acid polymer/composition". What are the specific metes and bounds of "intimate contact"?

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (US-629) for the reasons set forth in the office action mailed on 4/20/05 and further in view of the following remarks.

Applicant's amendment and remarks filed on 7/20/05 have been fully considered but are not found to be persuasive. The essence of applicant's argument lies in the lack of motivation to modify the disclosure of Jensen to arrive at a single polymeric layer in "intimate contact" with the fertilizer product as claimed. Applicant further urged that the coatings disclosed by Jensen are not substantially water-soluble. The examiner disagrees. US 3,265,629 to Jensen et al. discloses a method of coating solid particles, including fertilizers (col. 2, lines 36-42); col. 11, Example 7). Suitable coating employed includes aqueous solution of polymers containing both

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lipophilic and hydrophilic units, with the major percentage of the recurring units being hydrophilic (i.e. derived from dicarboxylic acids such as maleic acid and crotonic acid). Thus, water solubility is expected to be substantial as prior art uses a major percentage of hydrophilic monomers, and as further evident in using aqueous solution of the polymer coating. Other copolymerized units such as the instant itaconic acid, are also taught in minor amounts (col. 5, lines 57-72; col. 6, lines 5-12). Hence, the instant substantially water-soluble dicarboxylic acid polymer is suggested. The substantially water solubility of the resulting dicarboxylic polymer would be an inherent characteristic as the same monomeric units are used. In a preferred embodiment, the reference teaches hydrolyzed styrene-maleic anhydride copolymer containing a minor amount of other comonomer such as itaconic acid, which encompass the instantly recited "at least two different moieties" and the first and second reactants. Prior art further suggest experimental control of the resultant polymer solubility via inclusion of suitable solubilizing agent (col. 6, lines 13-37). Hence, the degree of

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water solubility can be adjusted as taught. It is noted that even if the newly recited "being in intimate contact with said fertilizer product" is supported in applicant's disclosure (i.e. barring the 112 issues), prior art's inclusion of a lipid layer would still fall within the scope of "intimate contact", taken its broadest interpretation.

Furthermore, the rejected claims do not preclude prior art lipid layer as asserted. Accordingly, since the reference discloses a method of coating fertilizer employing a polymer comprising a major amount of hydrophilic monomers (i.e. maleic acid/anhydride, crotonic acid) and a minor amount of comonomers (i.e. itaconic acid), this teaching makes the selection of at least two dicarboxylic monomers would be obvious and readily envisaged by one having ordinary skill in the art, motivated by the reasonable expectation of success in forming a coated fertilizer product as taught. Hence, the examiner's position is maintained.

Double Patenting

7. Claims 15-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting over claims 1-9, 11, and 25-33 of copending Application No.

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10/708,653 for the reasons of record. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

8. Claims 15-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 23-30 of copending Application No. 10/708,614.

This is a provisional obviousness-type double patenting rejection.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal

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disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Election/Restrictions

10. Claims 1-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/9/05.

11. This application contains claims 1-14 drawn to an invention nonelected without traverse in reply filed on 3/9/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened

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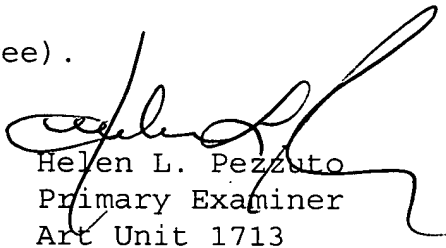
statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helen L. Pezzuto
Primary Examiner
Art Unit 1713

hlp